## The Artemis Accords: What Are They and Will They Work?

Michelle L.D. Hanlon July 29, 2020

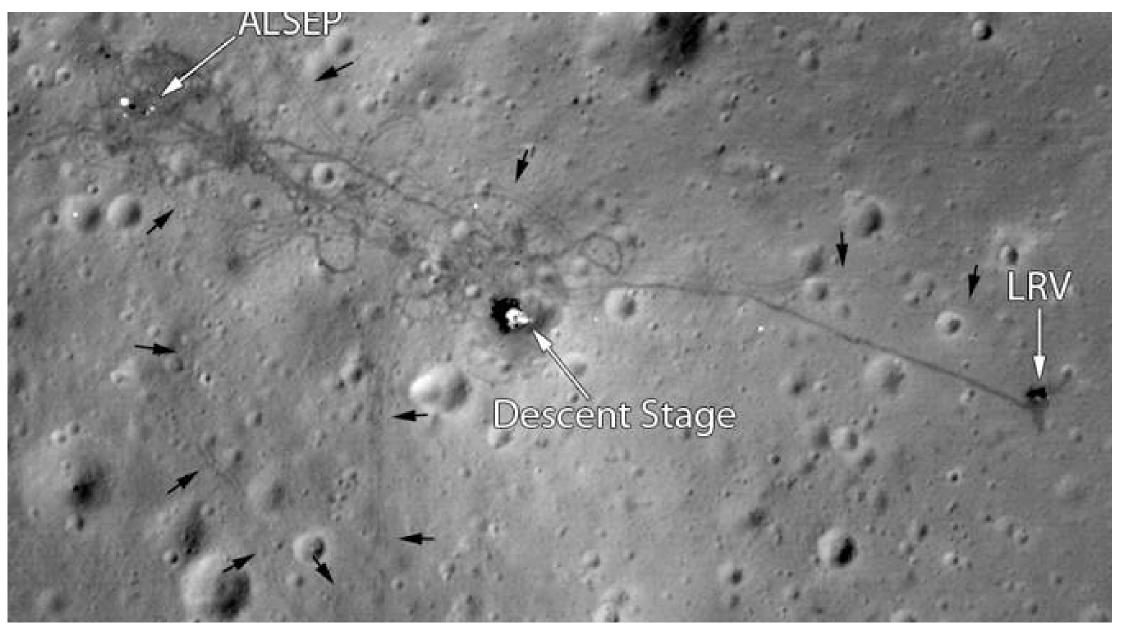
## FOR ALL MO NKIND



# That's one small step for man. And one giant mistake if we don't protect it.

Plans to land civilians and vehicles on the Moon threaten to desecrate six pristine Apollo Lunar landing sites. The UN has safeguarded other irreplaceable property here on Earth. Doesn't the Moon deserve the same protection? Take the next small step. Go to ForAllMoonkind.org if you agree.

ForAllMoonkind.org









#### **International Law**

- Outer Space Treaty
- Liability Convention
- Registration Convention
- Rescue and Return Agreement
  - All are silent with respect to the utilization of resources, in situ or otherwise.
  - But they do affirm the concept that no nation may claim sovereignty over any territory in space.
  - And require authorization and supervision.
- Moon Agreement

## Article I

- The exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be *the province of all mankind*.
- Outer space, including the moon and other celestial bodies, shall be *free for exploration and use by all States* without discrimination of any kind, on a basis of equality and in accordance with international law, *and there shall be free access to all areas of celestial bodies*.
- There shall be freedom of scientific investigation in outer space, including the moon and other celestial bodies, and States shall facilitate and encourage international co-operation in such investigation.

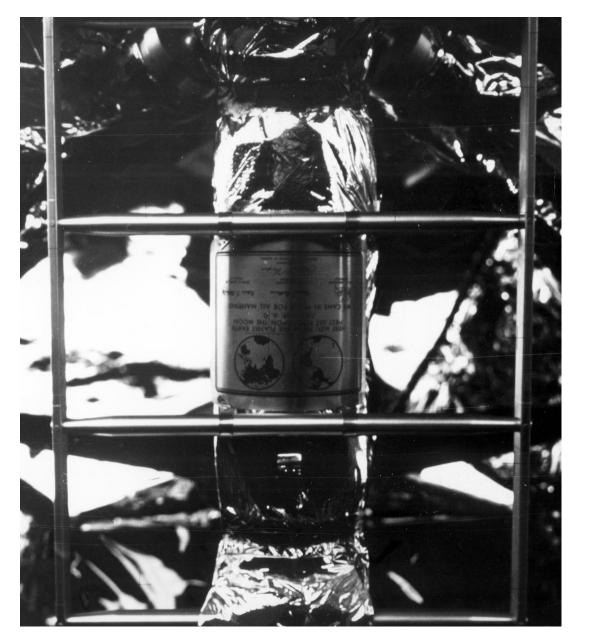
#### Articles II - V

- Outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means. ~Article II
- activities in the exploration and use of outer space shall be conducted in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding. ~Article III
- No nuclear weapons or WMD in orbit, on any celestial bodies or in outer space. Space shall be used exclusively for peaceful purposes. No military bases. But, you can use military personnel for peaceful purposes. ~ Article IV
- Astronauts are envoys of all humankind and shall be rendered all possible assistance. ~Article V



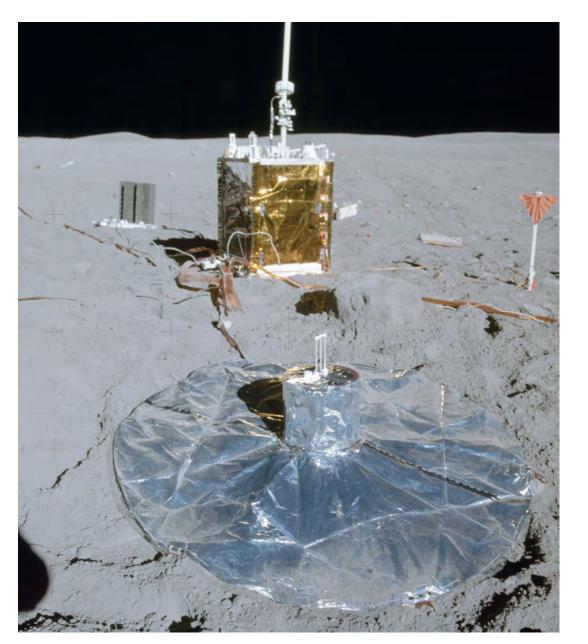
#### Article VI

- States bear international responsibility for national activities in outer space, including the Moon and other celestial bodies, whether the such activities are carried on by governmental agencies or by nongovernmental entities.
- States are required to *authorize and continue to supervise all non-governmental entities.*



#### Article VII Liability for Damage to a Space Object

- Entities can be liable "in the event of damage being caused" to a "space object."
- Negligence standard for damage occurring in space (Liability Convention).
- Drawn out, diplomatic process, consultations and ultimately a "Commission" – nonbinding.



#### **Article VIII**

- "State Party . . . on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object."
- Registration Convention.

#### Article IX: Due Regard to the corresponding interests of all other States Parties



respect, politeness, courtesy, civility, deference, respects, resect, consideration, thoughtfulness, attentiveness



🔰 Thesaurus.plus

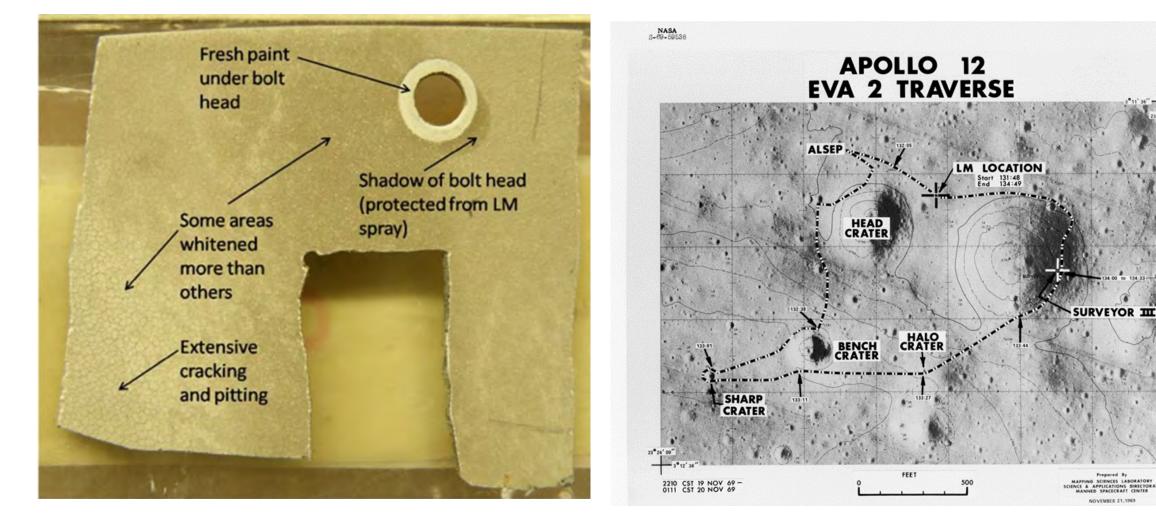
## **Due Regard**

The ordinary meaning of "due regard" calls for the first State to have such regard for the rights of the second State as is called for by the circumstances and by the nature of those rights. The Tribunal declines to find in this formulation any universal rule of conduct. The Convention does not impose a uniform obligation to avoid any impairment of the second State's rights; nor does it uniformly permit the first State to proceed as it wishes, merely noting such rights. Rather, the extent of the regard required by the Convention will depend upon the nature of the rights held by the second State, their importance, the extent of the anticipated impairment, the nature and importance of the activities contemplated by the first State, and the availability of alternative approaches.

> Chagos Marine Protected Area Arbitration (Mauritius v United Kingdom), 18 March 2015



#### Article IX: International Consultation prior to "harmful interference."





#### **Moon Agreement**

- Moon is defined to include all other celestial bodies within the solar system. ~Article 1
- The Moon and its natural resources are the *common heritage of [hu]mankind*. ~Article 11. Synonymous with *global commons*:
  - The area is not subject to national appropriation.
  - The area is free for scientific investigation.
  - All States share in the management of the area.
  - The benefits derived from exploitation of an area's resources must be shared with the developing States regardless of the level of participation.
  - The area must be used only for peaceful purposes; and
  - The area must be preserved for future generations.
- Some legal scholars argue this is Customary International Law.

#### **US** Law

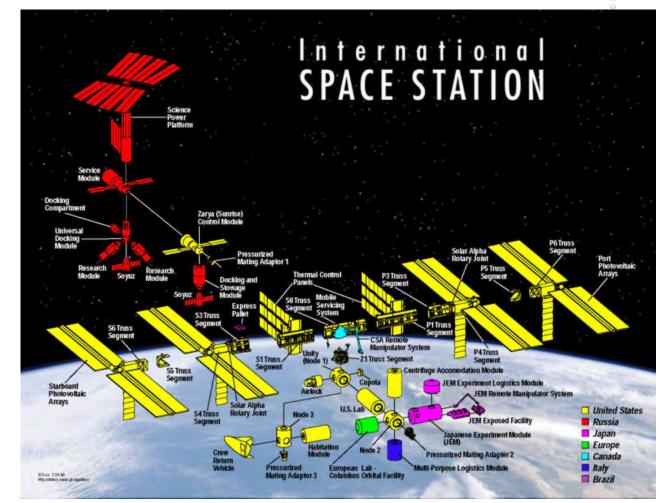
- Commercial Space Launch Competitiveness Act of 2015
- Any resources obtained in outer space are the property of the entity that obtained them, which shall be entitled to all property rights to them, consistent with applicable federal law and existing international obligations.
- Luxembourg, UAE, Japan?, China?

#### April 6 Executive Order on Encouraging International Support for the Recovery and Use of Space Resources

Americans should have the right to engage in commercial exploration, recovery, and use of resources in outer space, consistent with applicable law. Outer space is a legally and physically unique domain of human activity, *and the United States does not view it as a global commons*. Accordingly, it shall be the policy of the United States to encourage international support for the public and private recovery and use of resources in outer space, consistent with applicable law.

## What are the Artemis Accords?

- "Principles for a Safe, Peaceful, and Prosperous Future."
  - NOT a binding agreement or Treaty
  - NOT a contract or even proposed contract terms
- Intergovernmental Agreement for ISS
  - Good model for Gateway, but more complexities for lunar surface.
- Framework for cooperative agreements being negotiated now.



#### The Next Ten Slides, credit NASA

- The Artemis Accords are made up of ten guiding principles.
- Note the following slides were originally designed by NASA. All images are from NASA and all text that is not in purple is directly attributed to NASA.
- The author of the presentation kept all original images and text, however, text was moved to make room for commentary in purple.

#### **Peaceful Purposes**

International cooperation on Artemis is intended not only to bolster space exploration but to enhance peaceful relationships between nations.

Therefore, at the core of the Artemis Accords is the requirement that all activities will be conducted for peaceful purposes, per the tenets of the Outer Space Treaty.

#### **ARTEMIS**

Reaffirming OST Article IV – the Moon and other celestial bodies shall be used exclusively for peaceful purposes.





#### Transparency

Transparency is a key principle for responsible civil space exploration and NASA has always taken care to publicly describe its policies and plans.

Artemis Accords partner nations will be required to uphold this principle by publicly describing their own policies and plans in a transparent manner.

## **ARTEMIS**

Reaffirming OST Article XI – parties conducting activities in outer space agree to inform the UN as well as the public in general to the greatest extent feasible and practicable of the nature, conduct, locations and results of such activities.

#### Interoperability

Interoperability of systems is critical to ensure safe and robust space exploration.

Therefore, the Artemis Accords call for partner nations to utilize open international standards, develop new standards when necessary, and strive to support interoperability to the greatest extent practical.

## ARTEMIS





#### **Emergency Assistance**

Providing emergency assistance to those in need is a cornerstone of any responsible civil space program.

Therefore, the Artemis Accords reaffirm NASA's and partner nations' commitments to the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space.

Additionally, under the Accords, NASA and partner nations commit to taking all reasonable steps possible to render assistance to astronauts in distress.

## ARTEMIS

Reaffirming OST Article V – parties will render all possible assistance to astronauts.

#### **Registration of Space Objects**

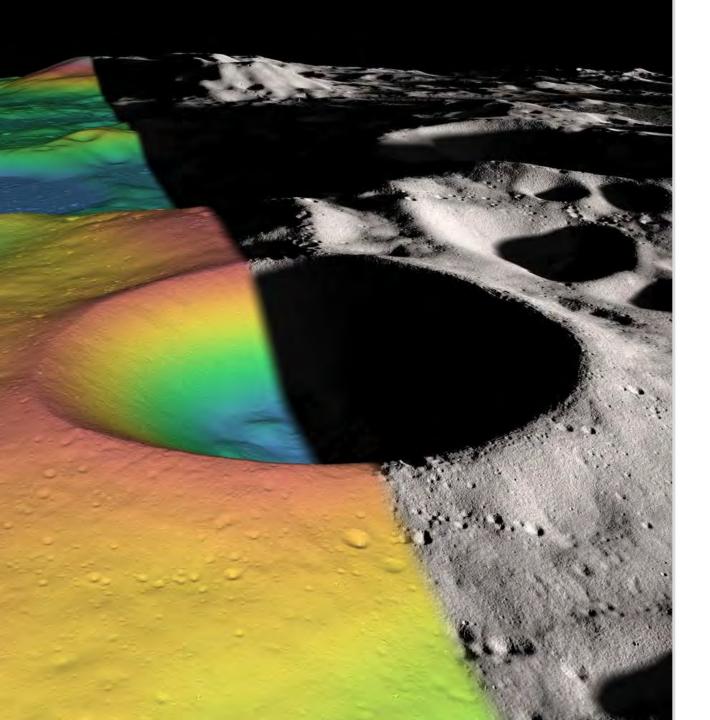
Registration is at the very core of creating a safe and sustainable environment in space to conduct public and private activities. Without proper registration, coordination to avoid harmful interference cannot take place.

The Artemis Accords reinforces the critical nature of registration and urges any partner which isn't already a member of the Registration Convention to join as soon as possible.

## ARTEMIS

Reaffirming OST Article VII and VIII – establishing responsibility and ownership. Also Registration Convention.





#### Release of Scientific Data

NASA has always been committed to the timely, full, and open sharing of scientific data.

Artemis Accords partners will agree to follow NASA's example, releasing their scientific data publicly to ensure that the entire world can benefit from the Artemis journey of exploration and discovery.

Reaffirming OST Article I –exploration carried our for the benefits of all countries, and facilitate and encourage international cooperation.

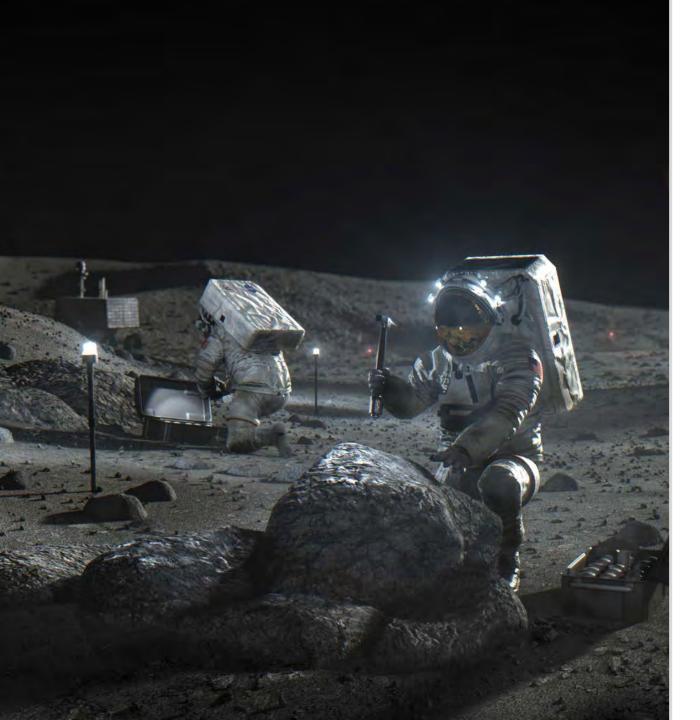
#### **Protecting Heritage**

Protecting historic sites and artifacts will be just as important in space as it is here on Earth.

Therefore, under Artemis Accords agreements, NASA and partner nations will commit to the protection of sites and artifacts with historic value.

ARTEMIS





#### **Space Resources**

The ability to extract and utilize resources on the Moon, Mars, and asteroids will be critical to support safe and sustainable space exploration and development.

The Artemis Accords reinforce that space resource extraction and utilization can and will be conducted under the auspices of the Outer Space Treaty, with specific emphasis on Articles II, VI, and XI.

ARTEMIS

#### **Deconfliction of Activities**

Avoiding harmful interference is an important principle of the Outer Space Treaty, which is implemented by the Artemis Accords.

Specifically, via the Artemis Accords, NASA and partner nations will provide public information regarding the location and general nature of operations which will inform the scale and scope of 'Safety Zones'.

Notification and coordination between partner nations to respect such safety zones will prevent harmful interference, implementing Article IX of the Outer Space Treaty and reinforcing the principle of due regard.

#### ARTEMIS

Reaffirming OST Article IX – Due regard and avoid harmful interference.





## Orbital Debris and Spacecraft Disposal

Preserving a safe and sustainable environment in space is critical for both public and private activities.

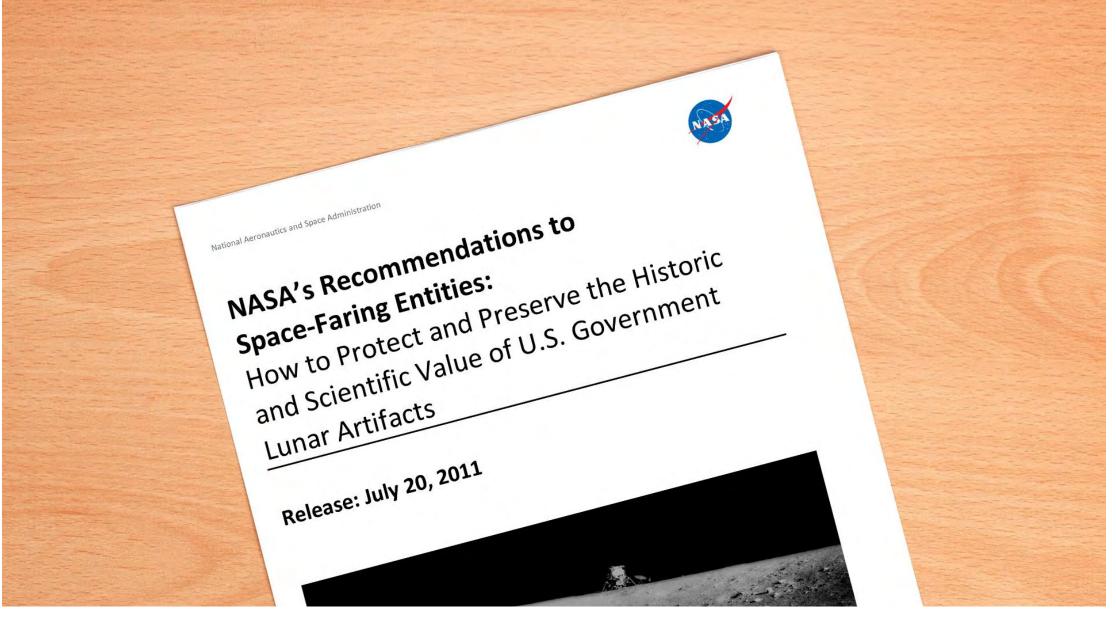
Therefore, under the Artemis Accords, NASA and partner nations will agree to act in a manner that is consistent with the principles reflected in the Space Debris Mitigation Guidelines of the United Nations Committee on the Peaceful Uses of Outer Space.

Moreover, NASA and partner nations will agree to plan for the mitigation of orbital debris, including the safe, timely, and efficient passivation and disposal of spacecraft at the end of their missions.

ARTEMIS



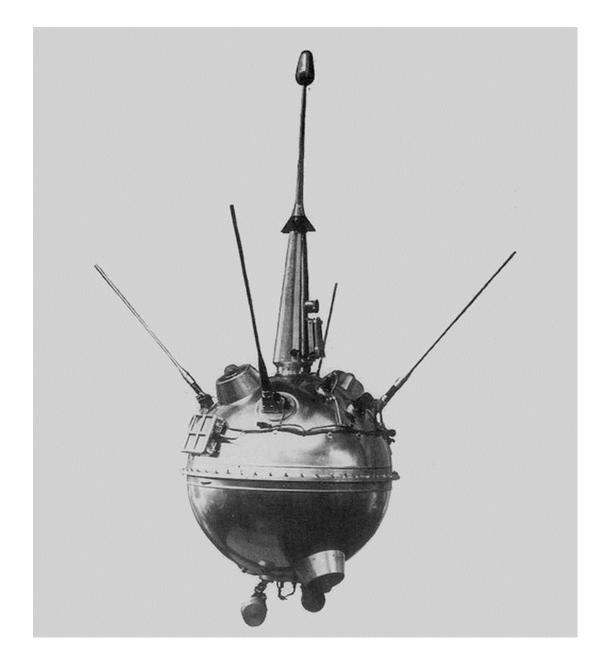




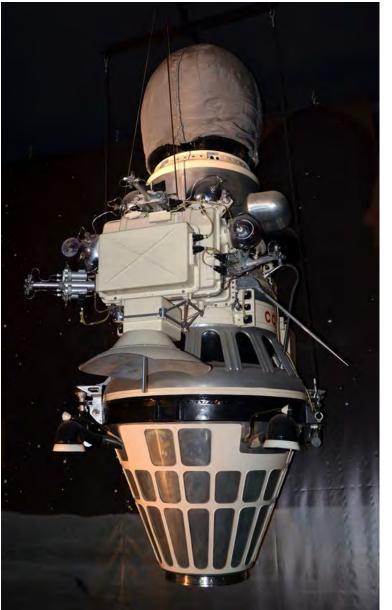
#### **Russian Law**

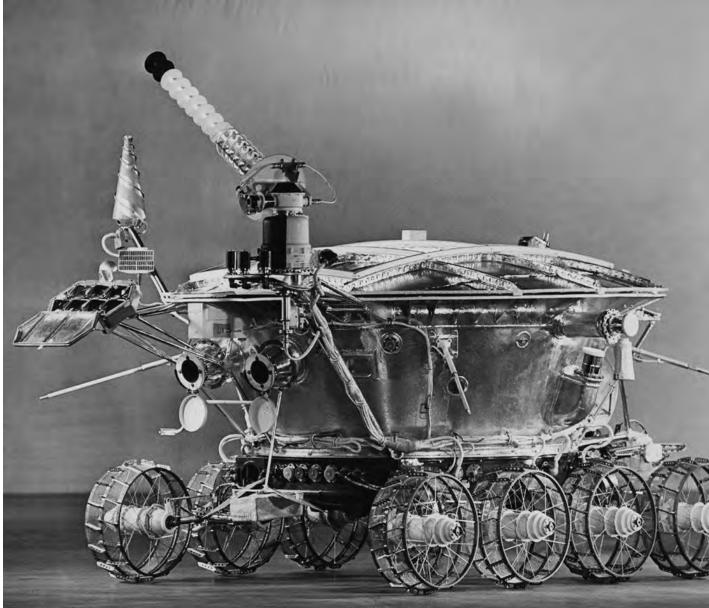
 "[i]n the immediate vicinity of a space object of the Russian Federation within the bounds of a zone minimally necessary for the guarantee of security [or safety] of space activity, rules may be established, which are obligatory for Russian and foreign organizations and citizens."

Закон Российской Федерации о Космической Деятельности [Law of the Russian Federation on Space Activity], Aug. 20, 1993, No. 5663-1 (as amended by Federal Law No. 54-ФЗ, Apr. 15, 2019), art. 17(5).









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# S.1694/H.R.3766

#### One Small Step to Protect Human Heritage in Space Act.

A bill to require any Federal agency that issues licenses to conduct activities in outer space to include in the requirements for such licenses an agreement relating to the preservation and protection of the Apollo 11 landing site, and for other purposes.

**Senator Peters, Senator Cruz** 

Preservation is a compelling idea that can help unite people rather than divide them. It is an idea that can help build a sense of community among people throughout the world.



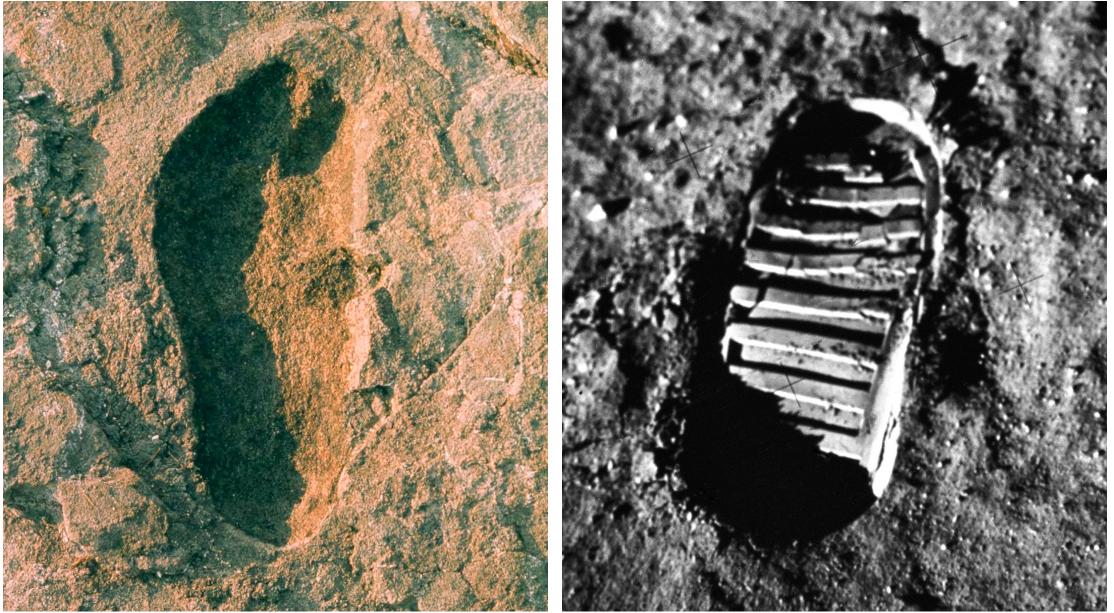
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#### What is World Heritage

- UNESCO World Heritage Convention seeks to protect sites of "cultural significance" which are so exceptional as to transcend boundaries and to be "of common importance for present and future generations of all humanity."
- Regardless of sovereignty, the Convention emphasizes "the importance, for all the peoples of the world, of safeguarding this unique and irreplaceable property, to whatever people it may belong."

#### What can you do?

- Vocally recognize the need to protect human heritage in space.
  - Sign our Declaration
- Build international consensus for safety zones by using them first for heritage protection.
- Promote research to understand plume effect so we do not suffer zone "overreach."
- Make preservation and safety zones customary.
- Call your Congressperson PASS HR3766
- Donate forallmoonkind.org



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"We are like dwarves sitting on the shoulders of giants. We see more, and things that are more distant, than they did, not because our sight is superior or because we are taller than they, but because they raise us up, and by their great stature add to ours."

-- Bernard of Chartres

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